

# Work Order ID 81927

March-21-12 9:15:19 AM

*WLGAT*  
**\*81927\***

Page 1

Item ID: D3319-3

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Wearplate

Start Date: 3/21/12 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 3/27/12 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan: *W*

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3319

*pc1*

100

0.00

**\*100\***

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3319

Dwg Rev: *C*

Prog Rev: *C*

2-Deburr if necessary

*B12-3-21*

*(12)*

110

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*110\***

QC

Memo

0.00

Quality Control

*B12-3-21*

Work Order ID 81927

\*81927\*

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March-21-12 9:15:19 AM

Item ID: D3319-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Wearplate

Start Date: 3/21/12 Start Qty: 12.00

\*12\*

Cust Item ID:

Required Date: 3/27/12 Req'd Qty: 12.00

\*12\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC8- Inspect parts - second check

0.00

\*120\*

QC

Memo

0.00

Quality Control

12 03 22 12

140

NC BRAKE

0.00

\*140\*

Brake NC

Memo

0.00

Brake NC

Form using DT8326 & DT8261 as per Dwg D3319Rev: C

SB 12/03/22

12

150

QC6- Inspect dimensions to drawing

0.00

\*150\*

QC

Memo

0.00

Quality Control

12 03 22

# Work Order ID 81927

**\*81927\***

Page 3

March-21-12 9:15:19 AM

Item ID: D3319-3 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Wearplate  
 Start Date: 3/21/12 Start Qty: 12.00 **\*12\*** Cust Item ID:  
 Required Date: 3/27/12 Req'd Qty: 12.00 **\*12\*** Customer:  
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 <b>*160*</b> Large Fab	Weld per dwg A/R Hardcoat steel Batch: <u>M119712</u> Large Fab	0.00							
Large Fab	Memo	0.00							
	Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Batch A/R 7560 Hardcoat Rod <u>M119712</u>								
170 <b>*170*</b> QC	QC10- Inspect visual per QSI004- ground welds	0.00							
Quality Control	Memo	0.00							
180 <b>*180*</b> QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							

(x12) me/el 2012-03-26

S.21/3/12

S.21/3/12

(x12)

# Work Order ID 81927

March-21-12 9:15:19 AM

**\*81927\***

Page 4

Item ID: D3319-3 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Wearplate  
 Start Date: 3/21/12 Start Qty: 12.00 **\*12\*** Cust Item ID:  
 Required Date: 3/27/12 Req'd Qty: 12.00 **\*12\*** Customer:  
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 <b>*190*</b> Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3  Memo START TIME: <u>2h40</u> OVEN TEMPERATURE: <u>320°F</u> FINISH TIME: <u>3h10</u>	0.00  0.00				12	2	(2P)	12/03/29
200 <b>*200*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				12		BL 12-3-28	
210 <b>*210*</b> Packaging Packaging	Packaging  Memo Identify on inside surface using a permanent fine point marker with the following:TCCA-PDA, Dart Aerospace Ltd.P/N: D3319-3, B/N: BXXXXXFor Product Eligibility see PDA05-18 and Stock Location: <u>497</u>	0.00  0.00				12/13/29		P	12

**Work Order ID 81927****\*81927\***

Page 5

March-21-12 9:15:19 AM

Item ID: D3319-3

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Wearplate

Start Date: 3/21/12 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 3/27/12 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220

QC21- Final Inspection - Work Order Release

0.00

**\*220\***

QC

Memo

0.00

Quality Control

12/3/29  
ME

12-03-29

# Picklist Print

March-21-12 9:15:18 AM

Page 1

Work Order ID: 81927

Parent Item: D3319-3

Parent Item Name: Wearplate

Start Date: 3/21/12

Required Date: 3/27/12

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: A05.05.12New issueKJ/JLM  
IPP Rev:B Now on Waterjet 06-10-03 JLM

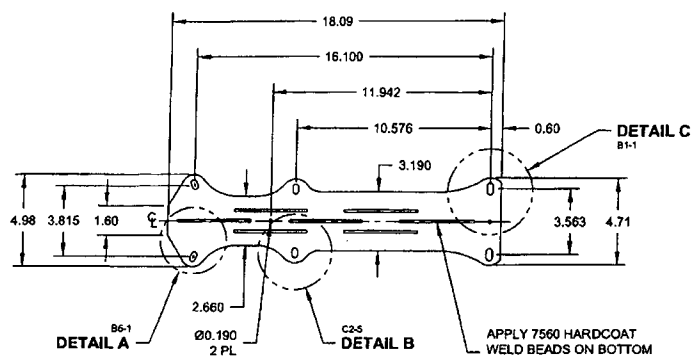
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S18GA		Purchased	No			100	sf	187.2960	3.2524	41.082947			
1010/1025 SHEET .048													

Rt-2-3-2x

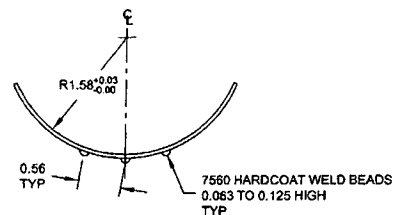
<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT019	187.296	
116268	3	
117806	184.296	

117806

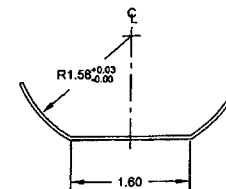
(12)



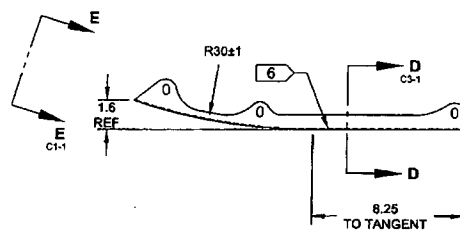
**D3319-1F FLAT PATTERN**



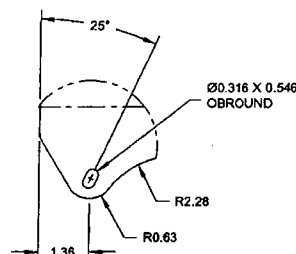
**SECTION D-D**  
SCALE 4X



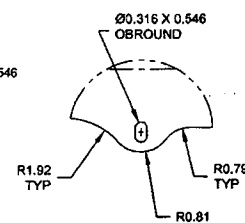
**SECTION E-E**  
SCALE 4X



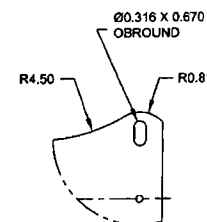
**D3319-1 BENDING DETAIL**  
MAKE FROM D3319-1F



**DETAIL A**  
SCALE 4X



**DETAIL B**  
SCALE 4X



**DETAIL C**  
SCALE 4X

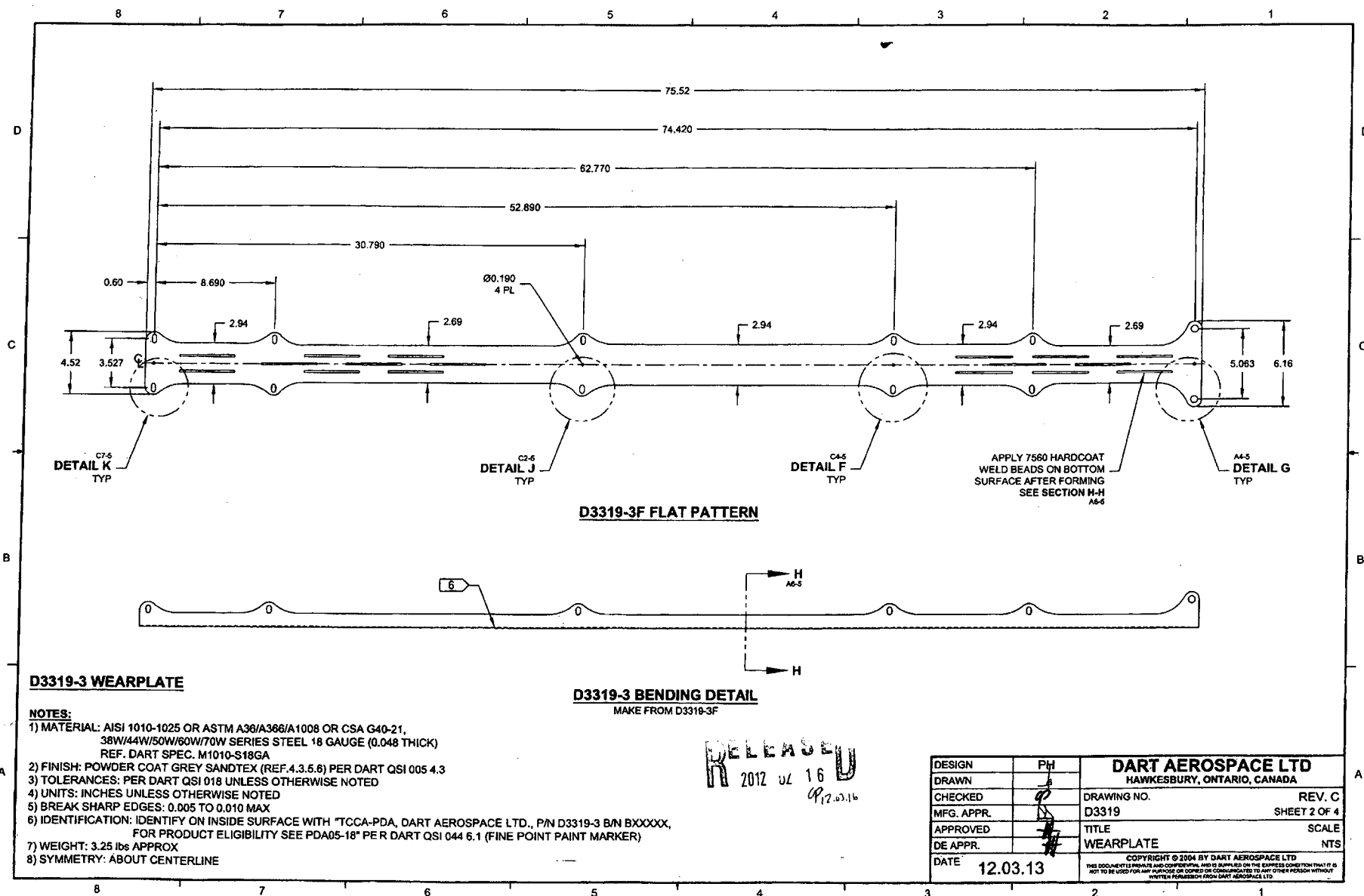
**D3319-1 WEARPLATE**

**NOTES:**

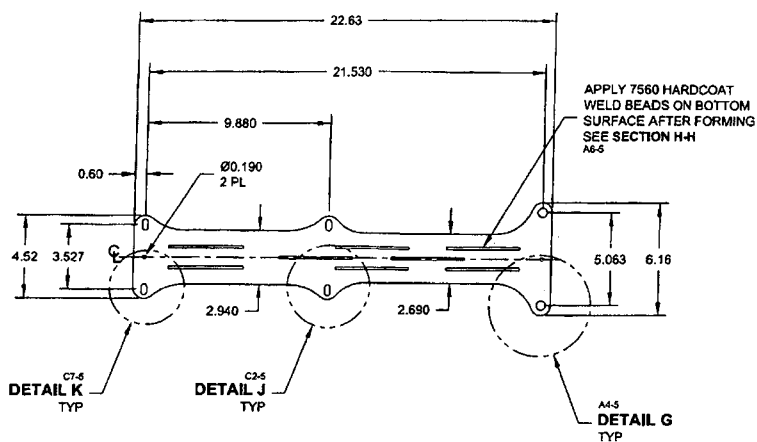
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK) REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 0.90 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

**RELEASED**  
2012-03-16  
PER ECN 12-546 12.03.16

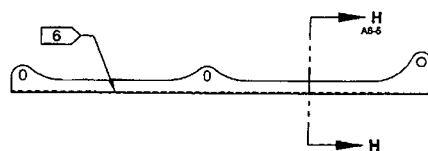
C	UPDATE TO CURRENT STANDARDS IAW QSI 043; CLOSED AFT MOST HOLE ON -3/-5/-7 (REF DETAIL G). SEE NCR12-547.	MB	12.03.13
B	WIDEN HOLES, REDUCE WIDTH ON -3/-5/-7	PH	05.06.06
A	NEW ISSUE	PH	04.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. C
CHECKED		D3319	SHEET 1 OF 4
MFG. APPR.		TITLE	SCALE
APPROVED		WEARPLATE	NTS
DE APPR.		COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	12.03.13		



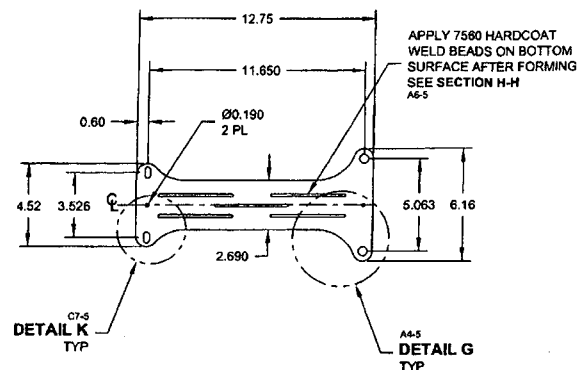




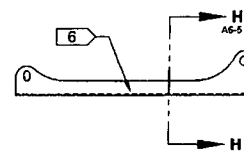
**D3319-5F FLAT PATTERN**



**D3319-5 BENDING DETAIL**  
MAKE FROM D3319-5F



**D3319-7F FLAT PATTERN**






**D3319-7 BENDING DETAIL**  
MAKE FROM D3319-7F

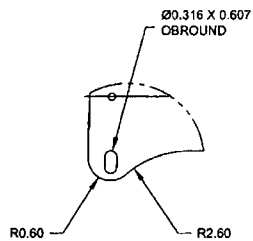
**D3319-5/-7 WEARPLATE**

**NOTES:**

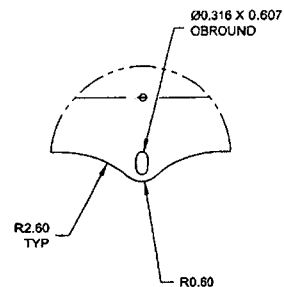
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK) REF. DART SPEC. M1010-S18GA
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY ON INSIDE SURFACE WITH "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-X B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18" PER DART QSI 046 6.1 (PERMANENT MARKER)
- 7) WEIGHT: D3319-5 = 1.05 lbs APPROX; D3319-7 = 0.60 lbs APPROX
- 8) SYMMETRY: ABOUT CENTERLINE

RELEASED  
2012-02-16  
412.5316

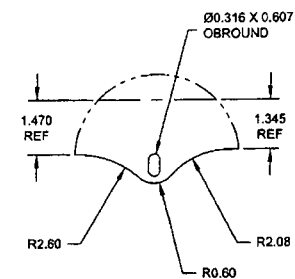
DESIGN	PH	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3319	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	NTS
DATE	12.03.13	COPYRIGHT © 2004 BY DART AEROSPACE LTD	
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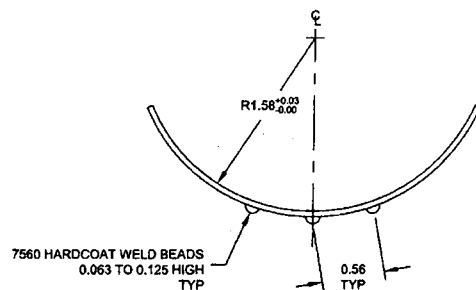
**DETAIL K**  
SCALE 2X  
B8-2  
C4-3  
C8-3



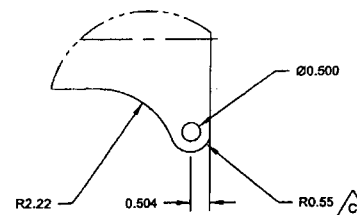
**DETAIL F**  
SCALE 2X  
B8-2



**DETAIL J**  
SCALE 2X  
B8-2  
C7-3



**SECTION H-H**  
SCALE 4X  
B4-2  
B3-3  
B6-3



**DETAIL G**  
SCALE 2X  
B8-2  
C2-3  
C6-3

**RELEASED**  
2012-02-16  
P.2 3.16

DESIGN	PH	<b>DART AEROSPACE LTD</b>
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. C
MFG. APPR.		D3319 SHEET 4 OF 4
APPROVED		TITLE SCALE
DE APPR.		WEARPLATE NTS
DATE	12.03.13	COPYRIGHT © 2004 BY DART AEROSPACE LTD

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DART AEROSPACE LTD	Work Order: 81927
Description: WEAR PLATE	Part Number: 03319-3
Inspection Dwg: 03319-3 Rev: C	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article     ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .190	+ .004 - .001	.192	2		V	Boz
Ø .500	+ .006 - .001	.500	2		V	
Ø .316	± .010	.318	4		V	
.607	± .010	.600	L		V	
2.94	± .030	2.954	4		L	
2.69	± .030	2.704	2		L	
3.527	± .010	3.518	2		V	
4.52	± .030	4.522	2		V	
5.063	± .010	5.063	2		V	
6.16	± .030	6.165	2		V	
.60	± .030	.601	2		V	
8.690	± .010	8.690	1		T	Boz
30.790	± .010	30.790	2		T	
52.88	± .030	52.88	4		T	
62.770	± .010	62.770	2		T	
74.420	± .010	74.420	1		T	
75.52	± .030	75.52	1		T	
.050	± .010	.047	2		V	

Measured by: PB	Audited by:	Prototype Approval:
Date: 12-3-21	Date: 12-13-21	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries